NOTE ON CEROTOMA AND ANDRECTOR (COLEOPTERA, CHRYSOMELIDAE).

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Numerous lots of *Andrector* found injuring beans in Florida, Texas, and Arizona, and others submitted to me for identification from Central America and the West Indies show the need of a short note to correct misconceptions on identities and on nomenclature.

The generic name *Cerotoma* was proposed by Chevrolat, 1837. in the Dejean Catalogue (see Barber and Bridwell, 1940, Brooklyn Ent. Soc. Bul., vol. 35, pp. 1-12) to include 18 species, of which several were then without valid names while others had been described by Fabricius, Olivier, Latreille, etc., and are now referable to 5 genera, Aulacophora, Diabrotica, Neobrotica, Cerotoma, and Andrector. Selection and designation of I of these species, Crioceris caminea F., 1801, as genotype of Cerotoma by Chapuis, 1875 (in Lacordaire, Genera des Coleopteres, vol. 11, p. 230) is not invalidated by reason of the description given by Chevrolat, 1842 (in D'Orbigny, Dict. Univ. Hist. Nat., vol. 2, p. 420) which includes the characters of the male antennae of certain species now assignable in Andrector but not shown by the genotype. 1920 (Cat. Coleoptera Amer. N. of Mexico, p. 298), adopted this result, but in the quarter-century since then confused usage, together with misapplication of the specific name ruficornis to the bean pest in Arizona, requires notice. Weise, 1924 (Junk, Coleopt. Cat., pars 78, pp. 137-139), reunited Andrector and Cerotoma, listing 32 species and 10 synonyms or subspecies (1 species, laeta (F.), seems assignable in Diabrotica). A correct analysis of the numerous neotropical forms must await evidence not now available. but a few facts which now seem to be clear should be noted.

The color pattern is probably ancestral, since its intermediate expression is very similar in several different species, but in several of the species and in certain regions this pattern varies to obliteration either by reduction of the infuscation to almost entirely pallid elytra or by increase of markings into almost entirely black wing covers. The shores of the Caribbean seem to be the home of several similar species distinguishable in the males by characters hitherto not recorded, i.e., slight differences in the clypeal prominences and depressions of the male head. In these details the Texan sexpunctatus, the genotype of Andrector, seems to agree with, and to be only a local expression of, the Antillean species ruficornis Oliv., 1791 of which denticornis F., 1792, appears correctly listed as a

synonym, which has been found attacking leaves and pods of lima beans at Princeton, Fla., March 31, 1944, while the Arizonan species, which has been misidentified as *ruficornis*, displays a different clypeal form and a shorter, broader aedeagus indistinguishable in these characters from Guatemalan samples of a serious bean pest which I have identified as *atrofasciatus* Jac. Thus, the synonymy of the three species which attack bean plants in the United States seems to be as follows:

Cerotoma Chevrolat, 1837 (in Dejean Cat., revised, p. 403). Genotype, Crioceris caminea F., 1801, designated by Chapuis, 1875.

trifurcata (Forster, 1771—29), Eastern States. caminia (F., 1801—459).

Andrector Horn, 1872—152. Genotype, A. sexpunctatus Horn, 1872—152, monobasic.

Cerotoma auct. (part).

ruficornis (Olivier, 1791—200), West Indies, Florida, Texas.

denticornis (Fabricius, 1792—24), West Indies. sexpunctatus Horn, 1872—152, Texas. atrofasciatus (Jacoby, 1879—792), Central America, Arizona.

ruficornis auct. not Oliv.

In *Cerotoma* the antennae and front show no sexual differences. In males of *Andrector* the clypeus is deeply excavated and acutely ridged, and antennal joints 3 and 4 are conspicuously enlarged and modified into what appears to be a grasping organ.